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## Survival and Financial Performance of Japanese Subsidiaries in Malaysia and Thailand

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### ABSTRACT

*This paper empirically examines the effects of Japanese parent financial performance with interactions on the Japanese foreign subsidiaries financial performance. We used Japanese outward Foreign Direct Investment (FDI) with a panel data of two ASEAN countries that received the highest Japanese FDI for the period 2003 until 2009. The purpose of this paper is to establish a relationship that is statistically significant with regard to the performance of Japanese subsidiaries located in Malaysia and Thailand using the ORBIS database. A multiple regression model has been applied in this research and the results reveal that some parent's financial ratios have influence on the subsidiaries financial performance. Moreover, the parent company's 'R&D per operating value', 'profit margin,' and 'solvency ratio' are the best indicators of the performance of the subsidiaries in the two-host countries.*

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**Keywords:** *Entry mode, Foreign Direct Investment (FDI), MNCs, Financial ratio, Subsidiary's performance*

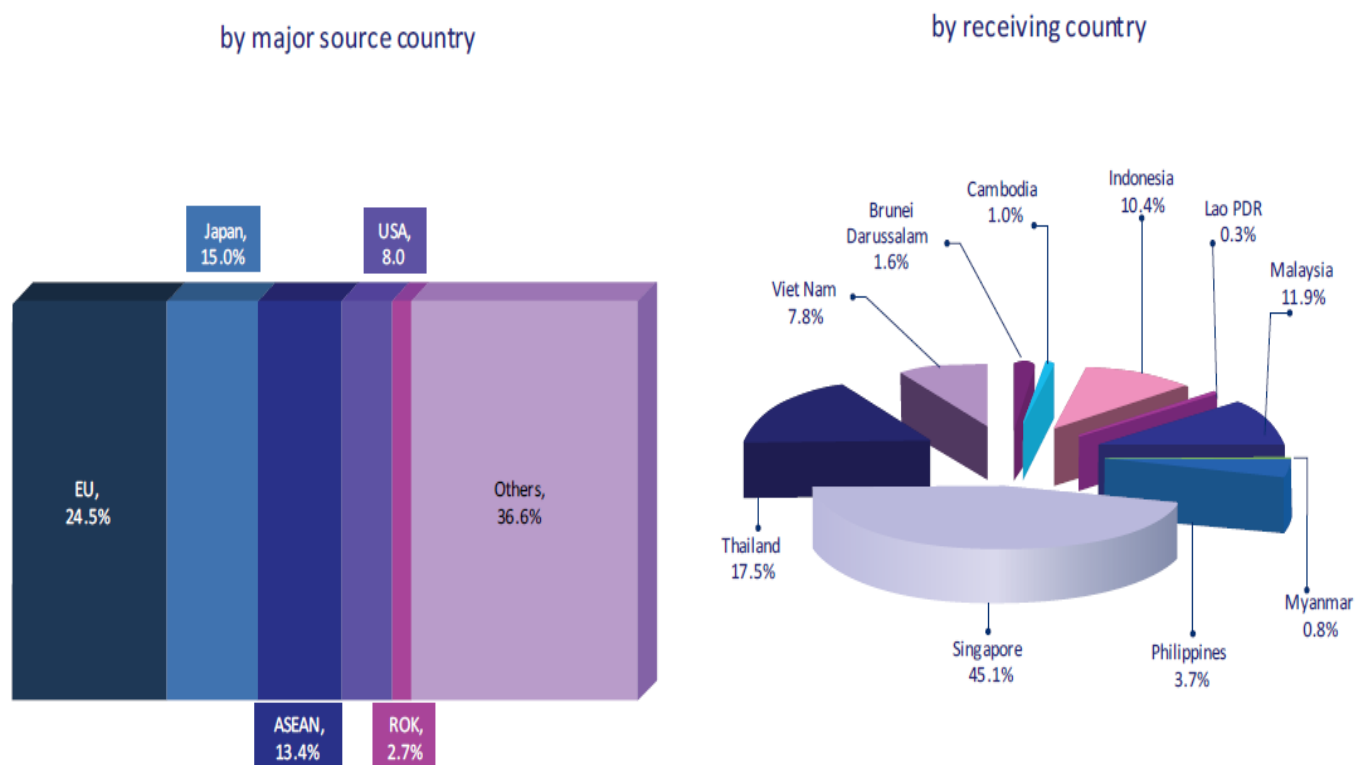
### 1. INTRODUCTION

Foreign Direct Investment (FDI) has recently become an important topic in the discussion on globalisation, whilst Multinational Corporations (MNC) play an important role in the process of global economic integration. FDI is often associated with MNC's activities and has already become an increasingly vital source of international capital and advanced technology for many developing countries. Through FDI, MNC's get access to larger markets, lower resource prices, cheap labour, and other benefits that can provide them with higher profitability and stable growth. At the same time, host countries that associate with the FDI inflow gain a variety of benefits, the most common of which is the transfer of modern technology. The extent to which a host country can secure these FDI benefits is likely to depend upon the mode of entry of foreign firms. To maintain or achieve competitiveness and profitability, MNC's must respond to a range of challenges, including rapid improvements in technology, declining employment, and output, globalisation of markets, and environmental requirements.

North America, Western Europe, and Japan are among the largest contributors of FDI occurring between the industrialised countries. With rapid economic growth in Asia, intra-regional trade and intra-regional FDI is also increasing. Among these three FDI major investors, Japanese firms have been globalised in the sense of overseas operation since the mid-1980s. Since then, outward FDI in Asia by Japanese MNC's has been a major source of intra-regional FDI in Asia. As for The Association of Southeast Asian Nations (ASEAN) countries, much of South to South FDI is close to their home market at first, and then tends to gradually expend (Hiratsuka, 2007).

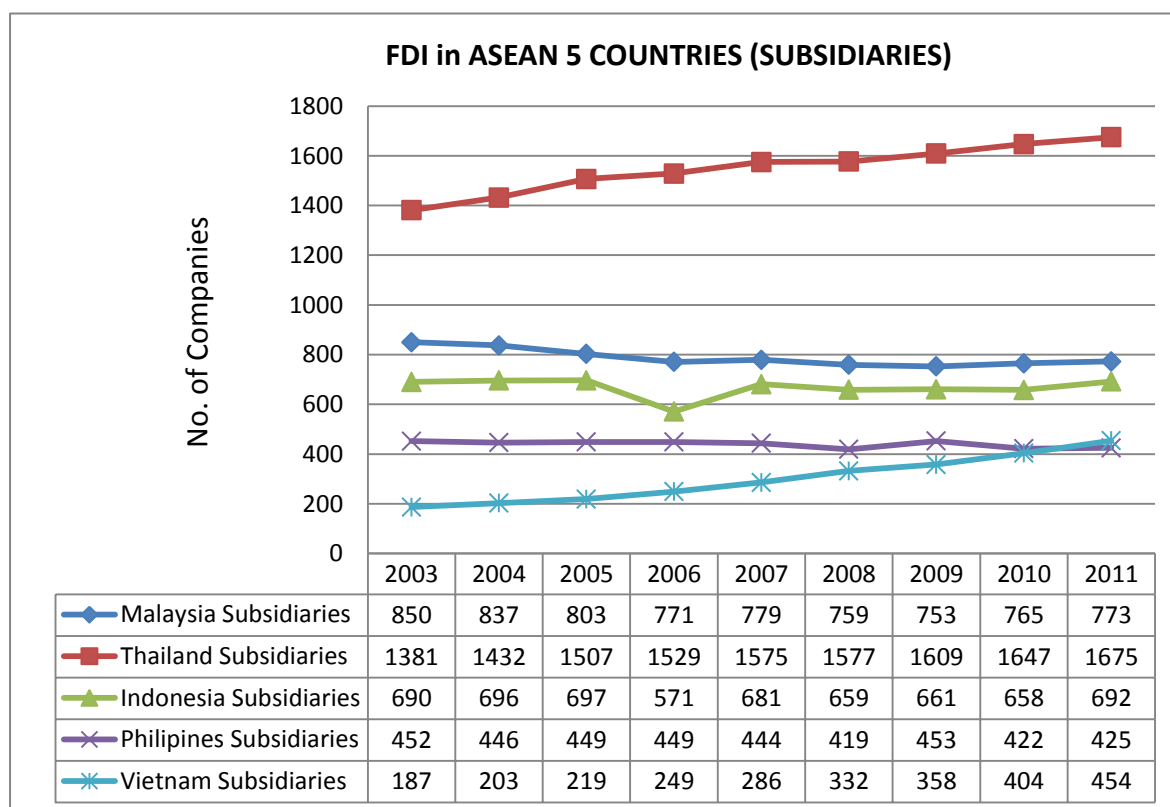
Figure 1 shows the cumulative FDI net flow to ASEAN countries from 2003 to 2008. Japan's outward FDI by country/region in the year 2010 shows that ASEAN countries have the most increase of FDI with a 27.5-percentage change from the previous year (JETRO, 2011). Additionally, Figure 2 shows Japanese subsidiaries in selected ASEAN 5 countries from year 2003 until 2011. The graph clearly indicates that Thailand had the highest number of Japanese subsidiaries since 2003 with 1381 companies. The numbers slightly increase year by year until 2011 with 1675 companies. Malaysia had the second highest number of Japanese subsidiaries in nine years since 2003. Therefore, among the five ASEAN countries, we are more interested in evaluating the performance of Japanese FDI in two developing countries, namely Malaysia and Thailand due to the high percentage of FDI after Singapore. FDI has recently become an important issue in the discussion on globalisation; we believe that evaluations of performance of these two countries are significant to determine the relationship between parent and subsidiary performance at the host countries to sustain the investment and at the same time planning for contingency action for performance improvement.

Figure 1: Cumulative FDI net inflow to ASEAN, 2003-2008



Source: ASEAN Economic Community Chartbook 2009

Figure 2: Japanese FDI in ASEAN 5 countries from year 2003-2011



### 1.1. Japanese FDI in Malaysia and Thailand

Southeast Asia is one of the most important production bases for Japanese MNC's. According to Toyo Keizai in 1999, the number of Japanese subsidiaries in Southeast Asia was 2325 accounting for 28.8% of all Japanese subsidiaries around the world. The biggest production in Southeast Asia countries were based in Thailand (795 firms), followed by Malaysia (513 firms). Electrical and electronic appliances industries received the highest investment with 525 subsidiaries in Southeast Asia countries. A large proportion of the subsidiaries in this industry are in Malaysia (160 firms) and Thailand (126 firms). The second major field of investment is in the automobile parts industry with 302 firms in total. Almost half of Japanese subsidiaries (148 firms) in this sector are located in Thailand.

Bilateral and regional approaches for Free Trade Agreements (FTA) are currently being pursued to further improve the competitiveness of countries in the region, as seen in the European Union and NAFTA for Europe and North America respectively. The number of FTA's in effect, which was only 16 before 1990, increased by 51 in the 1990s and again by 120 in the next decade since the year 2000, indicating that FTA's have grown by around 200 over the last 20 years (JETRO, 2011). In particular, the Asia and Oceania region saw a recent spike in this number, as 60% of the FTA's in these regions have come into effect after 2005. This rapid increase comes from two contributors, including the full completion of ASEAN+1 FTA's in 2010, namely FTA's involving ASEAN and its neighbouring countries of Japan, South Korea, China, Oceania (Australia and New Zealand), and India respectively, and the steady promotion of Japan's bilateral FTA's with ASEAN countries.

An increasing number of Japanese companies take advantage of FTA's or at least consider the possibilities of doing so. Based on the JETRO survey in 2010, the companies that take advantage of major FTA's enacted by Japan (with Malaysia, Thailand, Philippines, Indonesia, Vietnam, ASEAN, Mexico, Chile and Switzerland) have reached 35.2% of all surveyed companies engaged in trade with FTA parties (673 companies). The Japan-Thailand Economic Partnership Agreement (29.1%) was the second highest ranking in the utilising rate by FTA for export (JETRO, 2011). Furthermore, the percentage of tariff-free products in these FTA's increased greatly. In the ASEAN Free Trade Area (AFTA) established within the ASEAN region tariffs have

been eliminated on 99% of all products subject to trade from January 2010. This means that the trade of goods within ASEAN region is almost entirely tariff-free and boosts the FTA utilisation value.

The ratio of companies that use FTA and export to Thailand is also high. Thailand was the most selected destination of exports from Japan, as approximately 90% companies that use AFTA responded that they export to Thailand (JETRO, 2011). Malaysia, Vietnam, Indonesia and Philippines follow Thailand as preferred export destinations and this indicates that companies that use FTA's take full advantage of them.

Malaysia also is one of Japan's most important economic partners, and vice versa. The bilateral relationship has been both solid and stable, with close personal ties between both countries at official and private sector levels. Bilateral trade has been growing significantly over the past decades. Referring to Malaysia's economic figures for 2009, Japan was the third largest export destination of Malaysia (at 71.79 billion Ringgit Malaysia, accounting for 10.8% of total exports) and the largest source of imports (at 14.2 billion Ringgit Malaysia, accounting for 12.5% of total imports) for the year 2008.

In conjunction with these regional approaches, a bilateral approach for economic partnership is becoming important. There is much room for further improvement of the bilateral relationship between Japan and Malaysia. The Japan-Malaysia Economic Partnership Agreement (JMEPA) is a strategic partnership for forging closer economic relations in trade and investments between the two countries. This agreement increased Japanese FDI into Malaysia during the second half of 2006 and had a positive impact. During the last eight years, the Malaysia-Japan Economic Partnership investment initiative has facilitated active discussions and cooperation on ways to improve the climate for Foreign Direct Investment in Malaysia and Japan. Foreign investment in Malaysia has risen steadily in recent years as mentioned in the previous discussion.

Currently, the impact of FDI on the economy and technology of the host country has caught the attention of international researchers. The aim of developing countries, such as Thailand and Malaysia in attracting FDI is to transfer technology overflows through demonstration, imitation, reverse engineering, individual contact, diffusion of management skills, and the exploitation of the international market. This can shrink the gap in higher technology within developed countries, upgrade industrial technology acceleration, and raise technology indentations during the course of development (Chen and Chen, 2009).

There is limited empirical research on foreign companies in Thailand and Malaysia. As Thailand and Malaysia makes it much easier for foreign companies to enter the country, and also when foreign companies respond to that in an encouraging manner, it is strategically important and useful to know more about them. While it is essential to develop more alternative models, theories, and frameworks, it is worth having more empirical research in order to understand how the system functions in the market.

## **2. THEORETICAL BACKGROUND**

Various approaches are usually taken when analysing advantages, entry mode, and performance. In the past literature, two different approaches are usually used to examine the entry mode. Firstly, a transaction cost model is used to explain the relationship between the entry mode and the performance attained by the subsidiary. Secondly, an eclectic paradigm clarifies the advantages of the parent company which determine the entry mode selection. Recently, some scholars have also introduced the Institutional Theory (IT) to explore the entry mode decision.

In past researches, entry mode studies were investigated based mainly on the transaction cost theory (Chen, et al., 2009; Palenzuela and Bobillo, 1999; Anderson and Gatignon, 1986). The transaction cost model offers powerful insights into the evolution of MNCs. Research by (Nicholas, 1987) found that transaction cost factors were important determinants in the decision of pre-1939 British manufacturing multinationals to invest in subsidiaries. Firms were expected to choose to enter a foreign market only if it offered a high risk adjusted return on investment. Therefore, the transaction cost theory is an appropriate methodology for modelling dynamic growth.

The content and predictions of the eclectic (or OLI) paradigm are firmly embedded in a number of different economic and business theories. The OLI paradigm holds that three kinds of advantages shape the determination of entering a foreign market, for instance ownership (O) advantages, location (L) advantages,

and internalisation (I) advantages (Dunning, 2000). The first, ownership advantages, refers to the possession of superior intangible and tangible assets (asset power) and skills, such as an MNC's experience, firm size, and an ability to develop product differentiation. The second sub-paradigm of the OLI tripod, offers a framework for evaluating alternative ways in which firms may organise the creation and exploitation of their core competencies given the local attractions of different countries or regions. Finally, the third is the internalisation advantages, which stand for the benefits of internalising foreign activities, such as avoiding the dissipation of knowledge, preventing deterioration in the quality of products, and eliminating the costs of writing and enforcing contracts.

Previous researchers define institutions by the 'rules of the game', including the laws and regulations of the host country (Daviz, et al., 2000; Oliver, 1997; North, 1990). The institutional theory considers the processes by which structures, including schemas, rules, norms, and routines, become established as authoritative guidelines for social behaviour (Scott, 2004). Entry mode choices that can be explained by an extended transaction cost model, including institutional and cultural variables, lead to better performance after entry compared to those that cannot be explained by the model (Brouthers, 2002).

### 3. HYPOTHESIS DEVELOPMENT

According to Dunning (1980), MNCs need to possess some compensating firm-specific advantages in order to compete effectively with local players in the host countries who generally have better access to and knowledge of the host market. On the other hand, investments in R&D are also important to any firm, because they help to develop technological capabilities, and improve the firm's competitive advantage and performance (Kotabe et al., 2002 and Helfat, 2000). Therefore, all of these factors may facilitate MNC subsidiaries to enjoy the advantages that help them compete against domestic firms.

Previous researchers put a lot effort into identifying the variables associated with a firm's performance (Un and Cuervo-Cazurra, 2008; Itnera, 2003; Brouthers, 2002; Nitsch, et al., 1996; Woodcock, et al., 1994). However, a subsidiary's performance can be measured in many different ways. Therefore, this research will investigate the performance of MNC subsidiaries in foreign markets, and explain several key factors.

#### 3.1. *Subsidiary Performance*

Empirical studies reveal a variety of efforts to uncover the nature of the multinationality-performance relationship, most of which are frustrated by the difficulties involved in capturing the degree of multinationality of the firm in a meaningful way when using large samples. Indeed, at the aggregate level, there would seem to be little reason to expect that there would ever be one clear answer to the form of the multinationality-performance relationship as it is likely to depend on a variety of contextual variables, such as the mode of entry, and the countries and sectors involved. Early studies concerning the performance of subsidiary performance indicate that they recorded superior performance in developed countries but mixed results in developing countries. This is due to reasons such as the strategy of transfer prices of intra-firm transactions, manipulation of the asset base of subsidiaries by MNCs which affect the rate of return on capital, host government tax, other policies, and etc. (Dunning & Lundan, 2008).

More recent studies have examined the strategy to enhance the performance of foreign owned firms such in Korea, Pakistan and Malaysia (Athukorala & Waglé, 2011; Lee & Rugman, 2012; Chang & Rhee, 2011). , Dunning, & Pearce (1984) established that profitability in terms of ROA (net income/assets) was positive and significantly related to the degree of multinationality of the world's largest industrial enterprises in 1972 but not so in 1977. In later study of 181 US and European MNE's, Geringer, Beamish, & Da Costa (1989) showed that the average annual rate of return on their sales between 1981 and 1985 monotonically rose as the proportion of their foreign subsidiaries to total sales (overseas sales ratio) increased between 1 and 60-80%.

On the other hand, scholars in strategic management have sought to analyse the relationship between a firm's performance, product diversification, and international expansion (geographical diversification) simultaneously. For example, Kim, Hwang, & Burgers (1989) focused on profit growth as measured by growth in operating profit margin and return on assets (ROA) found relatedness in product and international expansion to influence one another for a sample of 130 US MNE's in the early 1980's. Another study by Grant, Jammie, & Thomas (1988) used both categorical and Herfindahl index of product and international diversification on 304 UK MNE's found that profitability in the domestic market contribute to foreign expansion in the 1972 to 1984 period, which in turn contributes positively to the firm's profitability.



In the case of Japanese MNEs in early 1990's, Delios & Beamish, (2001) found that while their geographic scope was positively related to performance. While Geringer, Tallman, & Olsen (2000) study on the performance of Japanese MNEs between 1977 and 1993 used the ratio of foreign sales to global sales (Overseas sales ratio) and found that the profitability of the MNEs were negatively correlated with the degree of international diversification, although the latter effect was not consistent over time. Reviews of the international diversification literature reveal a wide distribution of conclusions that favour a positive relationship between the degree of multinationality of firms and their financial performance, those that favour a negative one and those which are inconclusive. Part of the explanation for such difference could be to do with problems in the measurement of their multinationality or performance or indeed both.

Additionally, there is a research in the Asia region on local ownership, entry mode and the FDI performance of Japanese subsidiaries by Makino & Beamish in the year 1998. They found that local ownership restrictions are negatively and significantly associated with the financial performance of wholly owned subsidiary but do not directly influence the joint venture subsidiary. Local ownership restrictions differ between countries. In the case of Thailand and Indonesia, they use general ownership criterion, which is applied to all foreign investment. Other country such as Malaysia and South Korea use a combination of general ownership criterion and industry-or project-based restrictions. Research by Mansour & Hoshino (2001) indicates that high firm-specific advantages through Greenfield investment perform better depending on the size and number of employees of the investing company.

Several suggestions have been made to improve the simple foreign to domestic sales, assets or employment ratios by incorporating some measure of the degree of spread across countries, and the distribution of assets in those countries (Sullivan, 1994). Goerzen & Beamish (2003) suggested that the relationship between economic performance and geographical asset diffusion was positive while the diversity of host countries was negatively related to performance. Furthermore, Hennart (2007) identified four common explanations employed by the authors to justify a multinationality-performance relationship known as financial diversification, the exploitation of scale economies, greater flexibility and enhanced opportunities for learning. In each case, he argues that a persuasive case for the superiority of the financial performance of MNEs is lacking.

From the past studies referenced above, various methods were used to measure the firm's performance including financial data, categorical data, Herfindahl index, and other indicators. In the current research, we are more interested to look into the data from the firm's financial statement. Additionally, financial statements represent the most reliable and most accessible source of information about the Japanese MNC's and their subsidiaries. It is also important to note that the effect of others factors into the firm's performance such as entry mode, international experience and the firm's characteristics can be different. Therefore, we included all these factors to find the correlation with the firm's performance.

### *3.2. Entry Mode*

Entry mode is one of the most crucial parts of the decision-making process faced by MNC's in order to go abroad through FDI. There are various methods of entry mode available i.e., wholly owned or joint venture. All of these methods involve a higher resource commitment and greater control (Hill et al., 1990). Research by Ogasavara and Hoshino (2007) found that Japanese-Japanese joint ventures, with a partner with previous experience in the local market, performed better than wholly owned subsidiaries and traditional international joint ventures. In addition, Dow & Larimo (2008) found that international experience plays an equally important role in the choice of entry mode. This is because the experience provides the subsidiaries with the mind-set, knowledge base and confidence to opt for the entry mode that entails greater resource commitments, less risk and higher level of information processing.

In Yoshihara's (1994) research on foreign firms in Japan, he used a five- scale (highly successful, successful, doubtful, unsuccessful, and highly unsuccessful) self-assessed questionnaire to compare the profitability of wholly owned firms and joint ventures. The results revealed that joint ventures had statistically significant results of higher profitability than wholly owned firms did. Furthermore, research by Hennart & Larimo (1998) using a sample of 401 Japanese and Finnish investments in US found that, Japanese investors tended to display a greater propensity to form joint ventures due to culture distance. Therefore, as mentioned by Oswald and Jahera (1991), there is a significant relationship between ownership and performance. Their results

showed that higher excess returns for a firm were contributed by a higher level of inside ownership. Therefore, the choice of entry mode is an important issue and deserves detailed investigation.

Drawing on the findings of these earlier studies, here is the first hypothesis:

- **Hypothesis 1a:** There is a significant difference in performance between wholly owned subsidiaries and joint venture subsidiaries.
- **Hypothesis 1b:** In the case of developing countries, joint venture entry mode performs better than wholly owned subsidiary.

### 3.3. Domestic Variables

Previous literature shows that the performance of MNC's can be determined by many different factors. Besides 'entry mode', 'domestic variables' and 'firms characteristic' are other factors that we considered in this research. Past research by Luo (2003) states that the contribution of the parent company's resources, information, adaptation and flexibility enables the subsidiary to gain more from the parent company. In addition, some of the parent firm's features, which either strengthen or weaken, may also contribute to the success of a subsidiary.

Thus, we measured the 'domestic variables' by the parent company's financial statement including the 'Profitability Ratio', 'Operational Ratio', 'Structure Ratio', and other variables. Profitability ratio was used to assess a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time. It is also a fundamental analysis that investigates the financial health of companies. Therefore, we used Parent's Return on Shareholder Fund (ROE), Return on Capital Employed (ROC), Return on Assets (ROA) and Profit Margin (PRMA) as indicators for the profitability ratio in this research.

While the Operational Ratio tests the efficiency of the management in their business operation. In normal conditions, the low operating ratio leaves a portion of the sales sufficient to give a fair return to the investors. R&D expenses are a type of operating expenses incurred in the process of finding and creating new products or services. Past studies used R&D ratio (R&D expenditure divided by total sales) as a variable to represent the value of technical resources (Delios & Beamish, 1999; Jaruzelski, Dehoff, & Bordia, 2005). Therefore, firms that make a larger investment in research are presumed to show superior performance. Research by (Delios & Beamish, 1999) on the corporate performance of Japanese firms found a significant relationship between R&D expenditure with a firm's performance. Thus, the findings also support that greater R&D investment might be an advantage in the firm's home market and contribute to superior corporate performance of the firm's investment in international markets. Additionally, Dunning, (1993) has revealed the positive relationship between a firm's international involvement and its possession of proprietary assets. Where the proprietary assets can be knowledge that is unique to the firm or it might stem from a firm's distinctive abilities in product R&D (Caves, 1996).

On the other hand, Jaruzelski, Dehoff, & Bordia (2005) in their research found no relationship between R&D spending and the primary measure of economic or corporate success such as growth, enterprise profitability, and shareholder return. They also found that a higher R&D to sales ratio was associated with a higher gross margin. Therefore, we include Parent R&D per Operating Value (RDOP) as a variable for operational ratio to investigate the influence of R&D intensity toward subsidiary performance. This ratio shows the percentage of an organisation's revenue that it spends on R&D and illustrates the importance of R&D to an industry or enterprise.

Moreover, the structure ratio was used to determine an appropriate structure of liabilities of the firm. These ratios help to determine how much shareholders would receive in the event of a company-wide liquidation. The higher the ratio, the more shareholders may receive. Thus, Parent Solvency Ratio or Shareholder Equity Ratio was used to measure this structure ratio.

As a result, here is the second hypothesis:

- **Hypothesis 2:** Parent financial ratios has significant impact on subsidiary performance

### 3.4. Parent Characteristics

In the current research, parent characteristics were measured by using two variables: parent's age and parent's number of workers. Past studies used age as a proxy to measure the international experience (Chang & Rhee,

2011; Delios & Beamish, 2001). This experience and involvement increases the possibility of firms committing large amounts of resources to foreign markets (Medcof, 2001). Additionally, international experience provides firms with important knowledge about customers, markets, cultures, and governments, which encourages future expansion (Hill, et al., 1990). Numerous studies have suggested that a firm's internationalisation experience and involvement plays an important role in the decision of entry mode and the firm's performance (Chari, et al., 2007; Doukas and Lang, 2003; Mathews, 2002; Li, 1995; Ramaswamy, 1993).

On the other hand, research by (Warusawitharana, 2012) on profitability and the lifecycle of UK firms found that average profitability changes systematically with firm's age. In early stage, firms realize a substantial profitability increase, while mature firms face a slow decline in profitability. This due to the investment in product development that generates a profitability increase for young firms whilst competitive pressure from new entrants leads to a profitability decline for mature firms. According to Woodcock, et al., (1994), there is a relationship between a firm's age and performance, with differences existing between established and new ventures. While empirical findings on industry lifecycle, theoretical model of industry lifecycle and dynamic, and empirical patterns of firm and industry dynamics collectively suggest that the shape of the size distribution should change as an industry ages (Dinlersoz & MacDonald, 2009). They also used firm's output, number of workers and sales to measure the firm's size.

Griswold (2009) found that during the 1980's and the 1990's, there was a strong positive correlation between the domestic and foreign growth rates of multinational firms. Desai, et al., (2008) in their analysis of US MNC subsidiaries and parent companies, found that a 10% increase in capital investment was associated with a 2.2% increase in domestic investment by the same company, including a positive connection between parent and subsidiary sales, assets, and number of employees. Additionally, in terms of number of employees, there are a few studies used this variable to measure the firm size such as Chang & Rhee (2011); Delios & Beamish (2001); Dinlersoz & MacDonald (2009); Capon, Farkey, & Hoenig (1990).

Therefore, as recommended by Cui et al., (2006) this research will also look into the length of the relationship between MNC's and their subsidiaries measured by the firm's age and number of workers as a parent characteristic variables in order to achieve clarity for this study. The following hypothesis is therefore expected:

**Hypothesis 3:** The parent characteristics are negatively correlated to subsidiary's performance.

Figure 3 illustrates the specific interrelatedness of the four main variables of a firm's performance model. These core variables are 'entry mode', 'domestic variables', 'international variables', and 'subsidiary performance'.

The direct investment of MNC's may bring in precious resources including capital, technology, management skills, R&D capabilities, and a network of international trade (Chen and Chen, 2009). As MNC's expand into new markets, their success is partially determined by the ability to transfer competitive technologies to local subsidiaries (Chung, 2001; Chen, 1996). As the MNC subsidiaries reside in an increasingly diverse environmental context, examining the performance of these subsidiaries as compared to that of their parent company becomes more and more important. Despite the growing interest amongst scholars and the business community, there is a lack of research on the performance of MNC subsidiaries using the parent company's financial analysis.

To date, extensive research on the effects of FDI has not been able to provide a clear and conclusive picture of the impact of Japanese firms on the local host's economies. While some studies seem to conclude that FDI has played an important role in a host country's development, others do not (Giroud, 2000). Luo (2003) suggested in his research on parent and subsidiary relationships that future research be conducted by using secondary data to avoid perceptual bias in the survey method. Japan has been a leader of FDI in East Asian economies due to several reasons such as geographical factors, cheap labour costs and a strong interest in promoting economic growth. As mentioned by Griswold (2009), a successful company operating in a favourable business climate will tend to expand employment in both domestic and overseas operations.

Numerous studies have reported literally on FDI such as (Chen and Chen, 2009; Pak and Park, 2005; Doukas & Lang, 2003; Konopaske et al., 2002; Giroud, 2000). However, it seems that very few have reported in the context of the performance of Japanese MNC subsidiaries using financial data analyses in a developing



country. Thus, it is crucial to examine the performance of Japanese MNC subsidiaries in a host country in order to retain investment and, at the same time, enhance the regional competitive advantages. Furthermore, this research attempts to determine the critical factors that contribute to the performance of MNC subsidiaries.

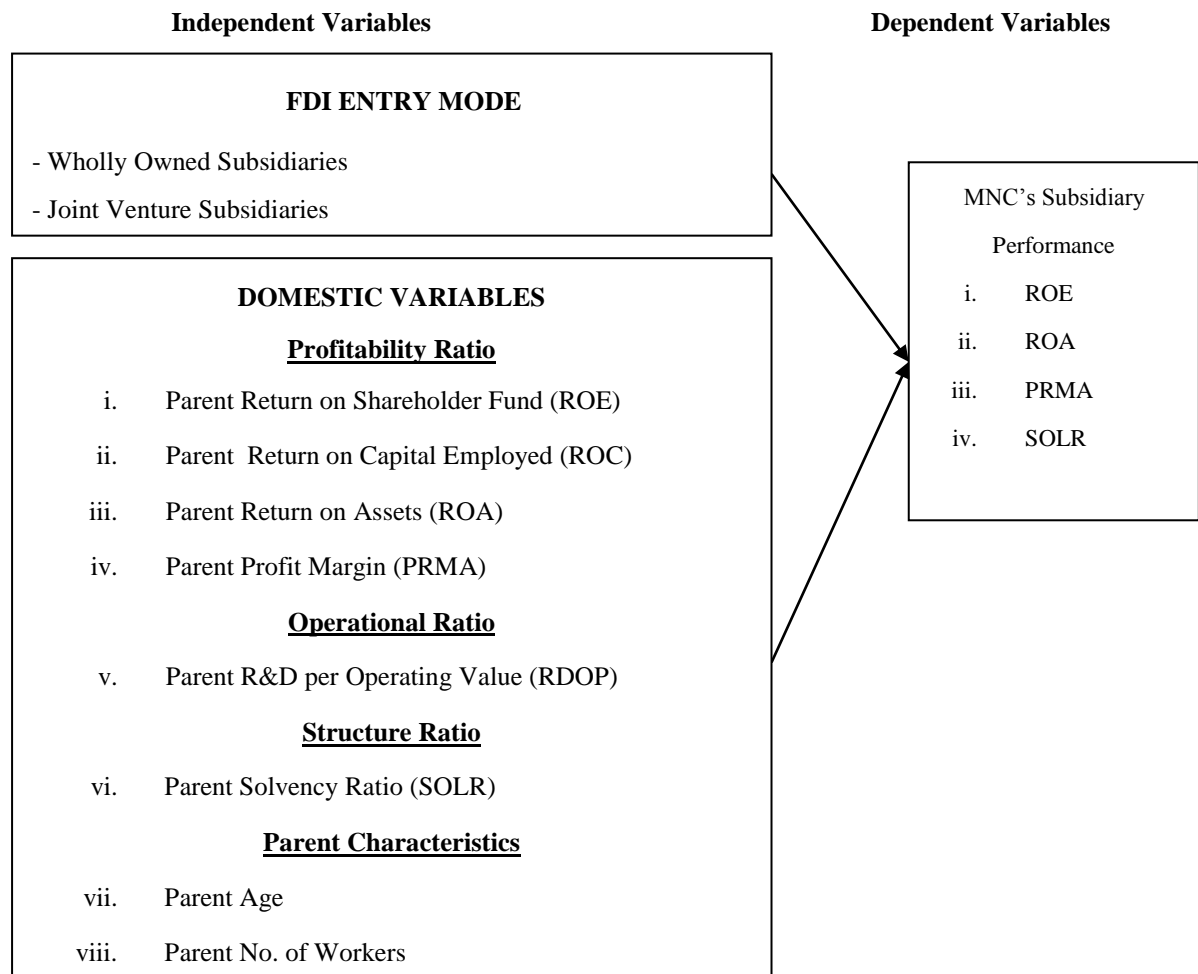


Figure 3: Conceptual Framework

## 4. METHODOLOGY

### 4.1. Data Collection

This study examines the relationship between entry modes, domestic variables, and parent characteristics of Japanese companies, and the attained performance of their subsidiaries. The principal focus of this study is the operating performance of Japanese companies. The six primary measures of operating performance are the rate of return on shareholder fund (RSHF) or known normally as return on equity (ROE), return on capital employed (ROC), return on assets (ROA), profit margin (PRMA), R&D per operating value (RDOP) and solvency ratio (SOLR). Table 1 shows the calculation of these ratios. The financial data used to measure the performance of Japanese subsidiaries as a dependent variable and parent company performance as proxies for the independent variables. We applied multiple regression models in this research and the suggested focus was on the performance of the selected MNC subsidiaries.

The classification of entry modes was based on the percentage of share ownership of the major shareholders as reported in this database. Firms with over 95% ownership were considered as wholly owned subsidiaries and those below than 95% ownership were considered as majority owned subsidiaries. Kamei (1996) and Yamazaki and Takeda (1992) indicated that it is appropriate to consider 95% of ownership as wholly-owned. Therefore, 95% ownership has been used in this research as well to distinguish between wholly owned firms and partnerships.

Table 1: Definitions of Financial Statement Ratios

Return on Shareholder Fund (ROE)	=	(Profit before tax/ Shareholders funds)* 100
Return on Capital Employed (ROC)	=	(Profit before tax + Interest paid) / (Shareholder funds + Non-current liabilities)*100
Return on Assets (ROA)	=	(Net income/ Total assets)*100
Profit Margin (PRMA)	=	(Profit before tax/ Net Sales)* 100
<b><u>Operational Ratio</u></b>	=	(Research & Development/ Net Sales)*100
R&D per Operating Value (RDOP)		
<b><u>Structure Ratio</u></b>	=	(Shareholder funds/Total assets)*100
Solvency Ratio (SOLR)		
<b><u>Other Variables</u></b>	=	2009 - Year incorporation
Age		
Ownership		0 = Wholly owned ; 1 = Majority Owned

#### 4.2. Sample

The data for the entry mode and the performance of the subsidiaries was derived from the ORBIS database for fiscal years 2003 through 2009. The criteria for inclusion of firms in the sample were as follows:

1. We selected only firms that show all the financial data that we use in this research. The companies that have 80% of missing data were eliminated from the sample.
2. We only selected the industry type of business and excluded all the others types of business such as banking and insurance firms.

Our final samples include 609 cases for Malaysia and 1085 cases for Thailand. It appears that the financial statement ratios of Japanese subsidiaries in Malaysia and Thailand come from a single database, thus we were able to directly compare these two countries because they use the same accounting principles.

#### 4.3. Dependent variables

Various variables have been used in previous studies dealing with a firm's performance. According to Capon, et al., (1990) in their research on determinants of financial performance, they found that financial performance variables include widely used measures embracing levels, growth and variability in profit (typically related to assets, investments or owner's equity) as well as such measures as market value, assets, equity, cash flow, research & development (R&D), sales and market/book value. Some variables serve as performance characteristics; for example, some studies use sales growth as a performance measure. In addition, all financial return variables were measured in percentage or fraction form such as concentration ratios, market share (%), growth rate (%), advertising/sales ratios, R&D/sales ratios, and ratios of capital investment to a size measure. Ittnera, et al., (2003) in their research about strategic performance measurement approaches to explain a firm's performance found that strategic performance measurement practices are associated with accounting measures such as sales growth.

However, in this research, the financial ratios were used to measure the performance of Japanese MNC subsidiaries in Malaysia and Thailand. The measurements consisted of three profitability ratios (ROE, ROA, and PRMA) and one structure ratio (SOLR). For the analysis, a simultaneous analysis of several groups was used using SPSS 18.0 for Windows software.

#### 4.4. Independent variables

This research consists of nine independent variables, which come from the data of parent companies. The parent company's data takes into account the parent company's ROE, ROC, ROA, PRMA, RDOP, SOLR, age and number of workers.

### 5. EMPIRICAL RESULT

#### 5.1. A descriptive comparison of the samples

In comparing some of the descriptive statistics of the samples from Malaysia and Thailand, some facts are worth mentioning. Most Japanese subsidiaries in these two countries started in late 1980 and the age of the parent companies are more than 65 years old. From 2003-2009, Malaysia had 133 (21.8%) wholly owned subsidiaries and 476 (78.2%) majority owned subsidiaries. While Thailand also showed a similar percentage to Malaysia in terms of entry mode in that wholly owned subsidiaries (66.4%) were less than majority owned subsidiaries (903 companies). Therefore, in the case of developing countries, a joint venture entry mode is more preferable than wholly owned ownership. Other variables as shown in Table 2 do not show any vast difference between these two countries. The table indicates that, for profitability ratio, Thailand shows a higher value than Malaysia except for parent and subsidiary solvency ratio and parent R&D per operating revenue in which Malaysia shows a better performance than Thailand in financial performance.

Table 2: Mean financial statement ratios for Japanese MNCs subsidiaries in Malaysia and Thailand for Fiscal Year 2003 until 2009

	Parent	Subsidiaries
<b>Return on Assets (ROA)</b>		
Malaysia	1.90	5.16
Thailand	2.23	7.51
<b>R&amp;D/Operating Revenue (RDOP)</b>		
Malaysia	4.76	-
Thailand	2.87	-
<b>Profit Margin (PRMA)</b>		
Malaysia	5.26	4.36
Thailand	4.96	7.48
<b>Return on Capital Employed (ROC)</b>		
Malaysia	6.55	14.85
Thailand	7.59	21.42
<b>Solvency Ratio (SOLR)</b>		
Malaysia	42.35	53.84
Thailand	36.93	50.74
<b>Return on Shareholder Fund (ROE)</b>		
Malaysia	8.23	14.48
Thailand	10.98	21.21
<b>Age</b>		
Malaysia	68.34	21.83
Thailand	65.26	19.56
<b>No. of Employees</b>		
Malaysia	125462	1187
Thailand	54166	1011
<b>Ownership</b>	<b>Wholly owned</b>	<b>Majority owned</b>
Malaysia	133	476
Thailand	182	903

### 5.2 Testing for differences between entry mode and a firm's performance

In this research, the classification of performance was measured by using subsidiary financial data comprised of profitability ratios and structure ratios. Non-parametric tests were employed to determine if a statistically significant difference existed between ownership and performance in these two countries. The Mann-Whitney test is used to see whether variances exist in different groups. Therefore, if the Mann-Whitney test is significant at  $p \leq 0.05$ , confidence can be gained in the hypothesis that the variances are significantly different and that the assumption of homogeneity of variances has been violated. In the case of Malaysia, there were no differences between entry mode and firm's performance except for solvency ratio. On the contrary, Thailand indicates a significance difference between entry mode and Japanese subsidiary performance as shown in Table 3.

In the case of Thailand, Japanese subsidiaries formed with a joint venture entry mode with majority ownership performed better than wholly owned subsidiaries with highest mean rank with significance value less than 0.05 as shown in Table 3. On the other hand, Malaysia shows dissimilar result with Thailand where most of the wholly ownership subsidiaries have better performance. Although, the result for Malaysia shows the highest performance level for whole ownership, but the statistical test does not show any significance in values except for the Solvency ratio. We can conclude that there is a significant difference between the means of ownership and the performance of Japanese subsidiaries in Thailand but not for those in Malaysia. In other words, the entry mode does have impact on the performance of MNC subsidiaries in Thailand. This finding is similar to previous research by Yoshihara (1994) and Hennart & Larimo (1998) which found that joint ventures had statistically significant results of higher profitability than wholly owned firms did and Japanese investors tended to display a greater propensity to form joint ventures instead of wholly owned entry mode. Additionally, this finding supported several past researches (Oswald and Jahera, 1991; Woodcock, et al., 1994; Nitsch, et al., 1996) that found significant ownership relationship in a firm's performance. Therefore, we support the hypothesis 1a and 1b where ownership had significant difference in performance and joint venture entry mode performs better than wholly owned subsidiaries in Thailand and not for Malaysia.

The insignificant results for Malaysia country is consistent with (Dang, 1977), who found no significant difference between the performance of wholly owned and joint venture firms. Such consistent and contradictory results were also found in (Chowdhury, 1992) where joint venture and wholly owned entry modes significantly differed based on the evaluating criteria. Therefore, this shows that there is no consistent association between entry mode and financial performance.

### 5.1 Multiple Regression

Multiple linear regression models with one dependent Y variable:

$$Y = i + Xb + e$$

Where Y = a vector containing observed scores on the dependent variable;

$i$  = a vector 1

X = a matrix of continuously distributed or categorical (dummy-coded) independent variables

b = the vector of regression weights

e = the vector of residual or error or leftover scoring unexplained by the model

A multiple regression applied for each of the independent variables in order to determine the significance of their effect on a subsidiary's performance and to test if the sign of their correlation followed the outcome of the hypothesis. The hypothesised signs and the results of the multiple regressions are shown in Table 4 and Table 5. These two tables consist of four regression models with four different outcomes or dependent variables for subsidiary performance measurement. The upper numbers in the rows show the b-value that states the relationship between the dependent variable and each of the predictor. The positive value means the positive relationship between the predictor and outcome, whereas a negative coefficient represents a negative relationship. According to Makino and Delios (1996), a positive sign for a regression coefficient indicates that the variable increases the likelihood of higher performance, while a negative sign indicates an increase in the likelihood of lower performance. The main findings are discussed below.

Table 3: Mann-Whitney test

		Malaysia				Thailand			
	Ownership Categories	N	Mean Rank	Sum of Ranks	Asymp. Sig (2-tailed)	N	Mean Rank	Sum of Ranks	Asymp. Sig (2-tailed)
Subsidiary Profit Margin %	Wholly Owned	95	250.23	23772.00	0.161	176	472.46	83152.50	0.012
	Majority Owned	370	228.58	84573.00		873	535.59	467572.50	
	Total	465				1049			
Subsidiary ROA	Wholly Owned	96	236.40	22694.00	0.813	181	441.39	79891.00	0.000
	Majority Owned	370	232.75	86117.00		899	560.45	503849.00	
	Total	466				1080			
Subsidiary Return on Shareholder Funds %	Wholly Owned	94	214.96	20206.00	0.247	176	438.70	77210.50	0.000
	Majority Owned	363	232.64	84447.00		868	539.49	468279.50	
	Total	457				1044			
Subsidiary Solvency Ratio %	Wholly Owned	96	282.50	27120.00	0.000	181	477.79	86480.50	0.006
	Majority Owned	369	220.12	81225.00		889	547.25	486504.50	
	Total	465				1070			

Multiple Regression Model for Malaysia and Thailand.

When,

$Y$  = Subsidiary's performance

$b_0$  = Constants

$b_1$  = Parent ROE

$b_2$  = Parent ROC

$b_3$  = Parent ROA

$b_4$  = Parent PRMA

$b_5$  = Parent RDOP

$b_6$  = Parent SOLR

$b_7$  = Parent Age

$b_8$  = Parent Ownership

$b_9$  = Log Parent No. of Workers

$\varepsilon_i$  = Error

$Y_i = (b_0 + b_1 X_{i1} + b_2 X_{i2} + b_3 X_{i3} + b_4 X_{i4} + b_5 X_{i5} + b_6 X_{i6} + b_7 X_{i7} + b_8 X_{i8} + b_9 X_{i9} + \varepsilon_i$

Therefore,

Subsidiary performance =  $b_0 + b_1$  (Parent ROE) +  $b_2$  (Parent ROC) +  $b_3$  (Parent ROA) +  $b_4$  (Parent PRMA) +  $b_5$  (Parent RDOP) +  $b_6$  (Parent SOLR) +  $b_7$  (Parent Age) +  $b_8$  (Parent Ownership) +  $b_9$  Log Parent (No. of Workers) +  $\varepsilon_i$

Based on Table 4 for Malaysia, three out of nine predictors have negative b-value indicating negative relationship with subsidiary Return on shareholder fund (ROE) performance. Thus, as the parent's ROC and SOLR increase, it may decrease the performance of the Japanese subsidiary in terms of ROE ratio. In this regression model, only two predictors are making significant contributions to the model, which are parent SOLR and parent RDOP. The parent RDOP has the positive significance value indicates that R&D activities and volume of sales significantly influence the performance of Japanese subsidiaries in Malaysia. Whilst for Thailand, six out of nine predictors indicate negative b-value with three significant predictors contribute to this



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model as shown in Table 5. Similarly, parent RDOP and parent SOLR indicate significant value for Malaysia and Thailand with the same coefficient value.

On the other hand, subsidiary performance in Thailand measured by ROA and PRMA show that parent PRMA and parent Age are significant predictors. In the case of Malaysia, parent RDOP is still the significant predictor for subsidiary performance including parent ROC variable. Moreover, an additional two more predictors were found to be significant for Malaysia subsidiary's PRMA performance. Increase in parent ROE, parent RDOP and parent PRMA will raise subsidiary PRMA performance in Malaysia. The subsidiary's solvency ratio indicates the highest R-square value among these four performance indicators for Malaysia and Thailand. For Malaysia, parent ROE, parent ROA, parent PRMA, parent SOLR and parent Age indicate significant contributions to subsidiary SOLR performance with varying values. In Thailand, most of the significant predictors are the same as Malaysia except for parent ROA and an additional two predictors, which are ownership and parent number of workers.

Regression analysis for Malaysia and Thailand indicate that subsidiary performance measured by subsidiary profit margin and subsidiary solvency ratio shows a strong relationship with independent variables with high R-square value compared to the other two financial measurements. In addition, these two-performance measurements also point out a mixture of significant predictors that contribute to the subsidiary's financial performance as previously discussed. In the case of Malaysia, most of the domestic variables in terms of the parent ROE, ROC, ROA PRMA, RDOP, SOLR and Age have significant influence towards the subsidiary's overall performance as revealed in Table 4. While Table 5 indicates that independent variables except parent's ROA were significant for Thailand. However, the sign of each variable differ for each country.

However, our findings show that not all the profitability predictors from the parent companies will enhance the performance of their subsidiaries in the host country. The parent company's ROA and PRMA indicate a negative value and a significant result with p value less than .05 for Malaysia and Thailand respectively. The negative value in this finding indicates that an increase in the parent company's ROA ratio and PRMA ratio by one standard deviation may reduce the subsidiary's performance. With a high investment in company assets, it may reduce the ROA ratio, which indicates a good subsidiary performance for Malaysia. Due to parent RDOP ratio having a positive significant value to subsidiary performance in Malaysia; therefore, we predict that investments in company assets from parent to subsidiary companies are important especially for R&D purpose. Moreover, parent PRMA ratio also can be used to measure the performance of Japanese subsidiary in Thailand. The negative significant value shows that lower parent profit or an increase in operating revenue or net sales may help to improve their subsidiary performance in the host country. An increase in operating revenue is important due to its contribution to R&D expenditures where both countries indicate that parent RDOP predictor is positively significant to subsidiary performance. The results of regression analysis suggest that some of the independent variables have positive and significant impact on subsidiary performance. These results validate hypothesis 2 and it establishes that Japanese subsidiary's in these two ASEAN countries perceives on RDOP and PRMA ratios as critical for subsidiary performance.

Our results also show that the parent characteristics, measured by the parent's number of local workers and parent's age indicate negative significant value for both countries based on subsidiary's solvency ratio performance. The negative values indicate that as the parent age increases, it may reduce the performance of their subsidiary in the host country. These results show that company profitability changes systematically with firm's age where in early stage, firms realise a substantial increase in profitability, while mature firms face a slow decline in profitability (Warusawitharana, 2012). This due to the investment in product development that generates profitability increase for young firms while competitiveness pressure from new entrants lead to decline in profitability for mature firms. It also supports the empirical findings on industry lifecycle, theoretical model of industry lifecycle and dynamics, and empirical patterns of firm and industry dynamics collectively suggest that the shape of the size distribution should change as an industry ages (Dinlersoz & MacDonald, 2009).

Moreover, increasing in the parent's number of workers does not increase the subsidiary performance in the host countries. The results show that additional number of workers may reduce their firm performance for both countries and significantly for Thailand. Thus, we support the third hypothesis that states that the parent characteristics are negatively correlated to the subsidiary's performance.

Table 4 : Regression coefficients for Malaysia with b-value in italic and standard errors in brackets

Dependent Variables	Subsidiary Return on Shareholder Fund				Subsidiary Return on Assets				Subsidiary Profit Margin				Subsidiary Solvency Ratio			
Independent Variables	Model				Model				Model				Model			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Constant	<i>15.34***</i> (5.84)	<i>9.06</i> (8.44)	<i>14.76</i> (10.20)	<i>1.23</i> (13.95)	<i>5.32**</i> (2.05)	<i>4.71</i> (2.97)	<i>6.56</i> (3.56)	<i>3.51</i> (4.91)	<i>2.63**</i> (1.22)	<i>2.60</i> (1.76)	<i>2.69</i> (2.11)	<i>2.31</i> (2.92)	<i>27.00***</i> (4.18)	<i>38.29***</i> (6.00)	<i>39.38***</i> (7.20)	<i>46.85***</i> (9.91)
Parent Return on Shareholder Fund	<i>0.23</i> (0.25)	<i>0.22</i> (0.25)	<i>0.24</i> (0.25)	<i>0.20</i> (0.25)	<i>0.14</i> (0.09)	<i>0.14</i> (0.09)	<i>0.15</i> (0.07)	<i>0.14</i> (0.09)	<i>0.11**</i> (0.05)	<i>0.11**</i> (0.05)	<i>0.11**</i> (0.05)	<i>0.11**</i> (0.05)	<i>0.37**</i> (0.17)	<i>0.38**</i> (0.17)	<i>0.38**</i> (0.17)	<i>0.41**</i> (0.18)
Parent Return on Capital Employed	<i>-0.27</i> (0.78)	<i>-0.36</i> (0.79)	<i>-0.3</i> (0.79)	<i>-0.07</i> (0.81)	<i>-0.61**</i> (0.27)	<i>-0.62**</i> (0.27)	<i>-0.59**</i> (0.28)	<i>-0.54</i> (0.28)	<i>-0.47***</i> (0.16)	<i>-0.47***</i> (0.16)	<i>-0.47***</i> (0.16)	<i>-0.47***</i> (0.17)	<i>-0.48</i> (0.55)	<i>-0.32</i> (0.55)	<i>-0.31</i> (0.55)	<i>-0.43</i> (0.57)
Parent Return on Assets	<i>1.10</i> (1.23)	<i>1.32</i> (1.25)	<i>1.18</i> (1.26)	<i>0.91</i> (1.27)	<i>0.84</i> (0.43)	<i>0.86</i> (0.44)	<i>0.81</i> (0.44)	<i>0.75</i> (0.45)	<i>0.18</i> (0.26)	<i>0.18</i> (0.26)	<i>0.18</i> (0.26)	<i>0.17</i> (0.27)	<i>-1.86**</i> (0.88)	<i>-2.23**</i> (0.89)	<i>-2.26**</i> (0.89)	<i>-2.12**</i> (0.90)
Parent Profit Margin	<i>0.20</i> (0.56)	<i>0.14</i> (0.56)	<i>0.12</i> (0.56)	<i>0.07</i> (0.56)	<i>0.28</i> (0.20)	<i>0.26</i> (0.20)	<i>0.25</i> (0.20)	<i>0.24</i> (0.20)	<i>0.53***</i> (0.12)	<i>0.53***</i> (0.12)	<i>0.53***</i> (0.12)	<i>0.53***</i> (0.12)	<i>0.72</i> (0.40)	<i>0.83**</i> (0.40)	<i>0.82**</i> (0.40)	<i>0.85**</i> (0.40)
Parent R&D per Operating Value	<i>1.91***</i> (0.59)	<i>2.03***</i> (0.60)	<i>2.15***</i> (0.61)	<i>1.64**</i> (0.71)	<i>0.70***</i> (0.20)	<i>0.71***</i> (0.21)	<i>0.75***</i> (0.21)	<i>0.64**</i> (0.25)	<i>0.35***</i> (0.12)	<i>0.35***</i> (0.12)	<i>0.36***</i> (0.13)	<i>0.34**</i> (0.15)	<i>-0.29</i> (0.41)	<i>-0.49</i> (0.42)	<i>-0.46</i> (0.43)	<i>-0.18</i> (0.50)
Parent Solvency Ratio	<i>-0.27**</i> (0.12)	<i>-0.25**</i> (0.12)	<i>-0.28**</i> (0.13)	<i>-0.22</i> (0.13)	<i>-0.07</i> (0.04)	<i>-0.07</i> (0.04)	<i>-0.08</i> (0.05)	<i>-0.06</i> (0.05)	<i>-0.01</i> (0.03)	<i>-0.01</i> (0.03)	<i>-0.01</i> (0.03)	<i>-0.01</i> (0.03)	<i>0.66***</i> (0.09)	<i>0.63***</i> (0.09)	<i>0.62***</i> (0.09)	<i>0.59***</i> (0.10)
Parent Age		<i>0.08</i> (0.07)	<i>0.06</i> (0.08)	<i>0.00</i> (0.09)		<i>0.07</i> (0.03)	<i>0.00</i> (0.03)	<i>-0.01</i> (0.03)		<i>0.00</i> (0.02)	<i>0.00</i> (0.02)	<i>0.00</i> (0.02)		<i>-0.14**</i> (0.05)	<i>-0.14**</i> (0.05)	<i>-0.11</i> (0.06)
Ownership			<i>-4.51</i> (4.53)	<i>-6.31</i> (4.70)			<i>-1.49</i> (1.58)	<i>-1.9</i> (1.65)			<i>-0.07</i> (0.94)	<i>-0.12</i> (0.98)			<i>-0.88</i> (3.20)	<i>0.12</i> (3.32)
Parent No. of Workers				<i>3.98</i> (2.81)				<i>0.89</i> (0.99)				<i>0.11</i> (0.59)				<i>-2.20</i> (2.00)
R-squared	0.047	0.049	0.052	0.051	0.063	0.063	0.065	0.067	0.127	0.131	0.136	0.136	0.207	0.221	0.221	0.223
F-Statistics	3.162	2.862	2.629	2.566	4.452	3.819	3.452	3.157	9.594	8.203	7.160	6.353	17.273	15.987	13.966	12.554
Sig No. of Observation	.005	.006	.008	.007	.000	.000	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000
	395				404				403				403			

\*, \*\*, \*\*\* indicates significance at the 90%, 95% and 99% level, respectively

Table 5: Regression coefficients for Thailand with b-value in italic and standard errors in brackets

Dependent Variables	Subsidiary Return on Shareholder Fund				Subsidiary Return on Assets				Subsidiary Profit Margin				Subsidiary Solvency Ratio			
Independent Variables	Model				Model				Model				Model			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Constant	<i>24.45***</i> (4.76)	<i>22.48***</i> (5.94)	<i>23.93***</i> (6.72)	<i>40.93***</i> (13.44)	<i>5.17***</i> (1.93)	<i>9.25***</i> (2.54)	<i>7.85***</i> (2.88)	<i>9.74</i> (5.95)	<i>4.90***</i> (1.46)	<i>7.99***</i> (1.93)	<i>7.74***</i> (2.19)	<i>8.23</i> (4.53)	<i>31.86***</i> (2.76)	<i>39.61***</i> (3.57)	<i>34.01***</i> (4.04)	<i>-8.36</i> (8.19)
Parent Return on Shareholder Fund	<i>-0.43</i> (0.30)	<i>-0.43</i> (0.30)	<i>-0.43</i> (0.30)	<i>-0.38</i> (0.30)	<i>-0.02</i> (0.06)	<i>-0.03</i> (0.06)	<i>-0.02</i> (0.06)	<i>-0.03</i> (0.06)	<i>-0.01</i> (0.05)	<i>-0.02</i> (0.05)	<i>-0.02</i> (0.05)	<i>-0.02</i> (0.05)	<i>0.20**</i> (0.09)	<i>0.19**</i> (0.09)	<i>0.18**</i> (0.09)	<i>0.13</i> (0.09)
Parent Return on Capital Employed	<i>1.59**</i> (0.65)	<i>1.62**</i> (0.65)	<i>1.64**</i> (0.65)	<i>1.43**</i> (0.66)	<i>0.40</i> (0.24)	<i>0.44</i> (0.24)	<i>0.40</i> (0.24)	<i>0.38</i> (0.25)	<i>0.31</i> (0.18)	<i>0.28</i> (0.18)	<i>0.28</i> (0.18)	<i>0.28</i> (0.19)	<i>-0.34</i> (0.34)	<i>-0.42</i> (0.34)	<i>-0.43</i> (0.34)	<i>-0.04</i> (0.34)
Parent Return on Assets	<i>-0.06</i> (1.13)	<i>-0.63</i> (1.13)	<i>-0.04</i> (1.13)	<i>-0.06</i> (1.13)	<i>0.14</i> (0.50)	<i>0.14</i> (0.50)	<i>0.12</i> (0.50)	<i>0.12</i> (0.50)	<i>0.19</i> (0.38)	<i>0.19</i> (0.38)	<i>0.19</i> (0.38)	<i>0.19</i> (0.38)	<i>0.14</i> (0.71)	<i>0.16</i> (0.71)	<i>0.07</i> (0.70)	<i>0.1</i> (0.69)
Parent Profit Margin	<i>-1.22**</i> (0.59)	<i>-1.23**</i> (0.59)	<i>-1.25**</i> (0.59)	<i>-1.00</i> (0.62)	<i>-0.65**</i> (0.25)	<i>-0.63**</i> (0.25)	<i>0.60**</i> (0.25)	<i>0.56**</i> (0.27)	<i>-0.55***</i> (0.19)	<i>-0.53***</i> (0.19)	<i>-0.53***</i> (0.19)	<i>-0.52**</i> (0.20)	<i>-0.48</i> (0.36)	<i>-0.43</i> (0.35)	<i>-0.32</i> (0.35)	<i>-0.97***</i> (0.36)
Parent R&D per Operating Value	<i>1.03</i> (0.61)	<i>1.00</i> (0.62)	<i>1.02</i> (0.62)	<i>1.64**</i> (0.75)	<i>0.44</i> (0.27)	<i>0.49</i> (0.27)	<i>0.47</i> (0.27)	<i>0.54</i> (0.33)	<i>0.23</i> (0.20)	<i>0.19</i> (0.20)	<i>0.18</i> (0.21)	<i>0.17</i> (0.25)	<i>0.72</i> (0.38)	<i>0.84**</i> (0.38)	<i>0.75**</i> (0.38)	<i>-0.78</i> (0.46)
Parent Solvency Ratio	<i>-0.21</i> (0.11)	<i>-0.20</i> (0.11)	<i>-0.20</i> (0.11)	<i>-0.28**</i> (0.13)	<i>0.03</i> (0.05)	<i>0.01</i> (0.05)	<i>0.01</i> (0.05)	<i>0.00</i> (0.05)	<i>0.08**</i> (0.03)	<i>0.07</i> (0.03)	<i>0.07</i> (0.04)	<i>0.06</i> (0.04)	<i>0.52***</i> (0.06)	<i>0.48***</i> (0.06)	<i>0.50***</i> (0.06)	<i>0.71***</i> (0.07)
Parent Age		<i>0.02</i> (0.04)	<i>0.02</i> (0.04)	<i>0.03</i> (0.04)		<i>-0.05**</i> (0.02)	<i>-0.05**</i> (0.02)	<i>-0.05**</i> (0.02)		<i>-0.04**</i> (0.01)	<i>-0.04**</i> (0.02)	<i>-0.04**</i> (0.02)		<i>-0.09***</i> (0.03)	<i>-0.09***</i> (0.03)	<i>-0.10***</i> (0.03)
Ownership			<i>-1.57</i> (3.41)	<i>-1.53</i> (3.41)			<i>1.56</i> (1.52)	<i>1.57</i> (1.52)			<i>0.28</i> (1.15)	<i>0.28</i> (1.15)			<i>6.24***</i> (2.12)	<i>6.06***</i> (2.08)
Parent No. of Workers				<i>-3.70</i> (2.54)				<i>-0.41</i> (1.13)				<i>-1.07</i> (0.85)				<i>-9.17***</i> (1.55)
R-squared	0.018	0.019	0.019	0.021	0.015	0.022	0.023	0.023	0.02	0.027	0.027	0.027	0.105	0.116	0.125	0.159
F-Statistics	2.643	2.308	2.044	2.056	2.204	2.766	2.553	2.282	2.909	2.342	2.929	2.602	16.930	16.310	15.475	18.178
Sig No. of Observation	.015	.025	.039	.031	.041	.008	.009	.016	.008	.002	.003	.006	.000	.000	.000	.000
	859				886				861				876			

\*, \*\*, \*\*\* indicates significance at the 90%, 95% and 99% level, respectively

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## 6.0 DISCUSSION AND CONCLUSION

Japanese firms have been globalised in the sense of overseas operations since the mid-1980's. Since then, outward FDI in Asia by Japanese MNC's has been a major source of intra-regional FDI in Asia. This study examines the relationship between the financial ratios of Japanese parent companies and the attained performance of their subsidiaries in two ASEAN countries namely, Malaysia and Thailand. The relationship between ownership and a firm's performance is an important issue. In the current study, we found that Malaysia wholly owned subsidiaries have a better performance than the joint venture entry mode. Although, the result for Malaysia shows the highest performance level for whole ownership, but the statistic test does not show any significant difference except for Solvency ratio performance. The insignificant ownership results for Japanese subsidiaries in Malaysia show that, whether the form of business falls into wholly owned or joint venture method, there were not reflect the subsidiary ROE, ROA, and PRMA financial ratio. The insignificant result for Malaysia is also consistent with (Dang, 1977; Mansour & Hoshino, 2001), who found no significant difference between the performance of wholly owned and joint venture firms.

On the other hand, Thailand indicates all significance difference between entry mode and Japanese subsidiary financial performance, ROE, ROA, PRMA and SOLR. The results show that majority ownership performs better than wholly owned subsidiaries with highest mean rank as shown in Table 3. We can conclude that there is a significant difference between the means of ownership and the performance of Japanese subsidiaries in Thailand but not for those in Malaysia. The varied findings for Malaysia and Thailand may related to the local ownership restrictions that differ among countries where Thailand use the general ownership criterion, while Malaysia use combination of general ownership criterion and industry-or project-based restrictions (Makino & Beamish, 1998).

Additionally, the significant result in parallel with the several past research results (Oswald and Jahera, 1991; Woodcock, et al., 1994; Nitsch, et al., 1996) that found a significant relationship between ownership and firm's performance. Therefore, we support the hypothesis 1a and 1b where ownership had significant difference in performance and joint venture entry mode performs better than wholly owned subsidiaries in Thailand and not for Malaysia. Additionally, consistent and contradictory results were also found in (Chowdhury, 1992) where joint venture and wholly owned entry modes significantly differed based on the evaluating criteria. Therefore, our findings confirm that there is no consistent association between entry mode and financial performance.

Moreover, the results also reveal that Japanese parent company's financial performances are significantly influenced by the subsidiaries financial performance in Malaysia and Thailand. It proved from the findings that parent operating revenue, R&D expenses, and profit margin are important indicators for subsidiary financial performance. The positive significant values for the parent's RDOP show the importance of parent R&D expenses and net sales towards their subsidiary performance. As mentioned by Luo (2003), the contribution of the parent company's resources, information, adaptation, and flexibility enable the subsidiary to gain more from the parent company and at the same time increase their performance. Moreover, based on the OLI theory, possession of superior intangible and tangible assets from parents to subsidiaries in developing product differentiation to satisfy local market need with R&D activities is a part of the ownership advantages that may enhance the performance of the subsidiary in the host country.

However, our findings also show that not all the profitability predictors from the parent companies will enhance the performance of their subsidiaries in the host country. The parent company's ROA and PRMA indicate a negative value and a significant result for Malaysia and Thailand respectively. With low net income and high investment in parent company assets, it probably may reduce the parent's ROA ratio and indirectly increase the solvency ratio for Malaysia subsidiary. Due to parent RDOP ratio that have positive significance value to subsidiary performance in Malaysia; therefore, we predict that high investments in company assets at parent companies are important especially for R&D activities. As mentioned by Delios & Beamish (1999), firms that make a larger investment in R&D might have an advantage in the firm's home market and contribute to superior corporate performance of the firm's investment in international markets.

In the case of Thailand, the parent PRMA indicates a negative significant relationship with subsidiary performance. Therefore, an increase in the parent's operating revenue or net sales might help the subsidiary to have a better financial performance especially in the subsidiary's ROE, ROA, PRMA, and SOLR. It appears that the parent's RDOP ratio also shows a positive significant value for Thailand, therefore, an additional amount of expenses in R&D activities is another alternative to increase the operating revenue that might help the Thai

subsidiaries to have better performance. These results validate hypothesis 2 and it establishes that Japanese subsidiary's in these two ASEAN countries perceives that the RDOP and PRMA ratios are critical for the subsidiary financial performance. Our findings contradict with (Jaruzelski, Dehoff, & Bordia, 2005; Mansour & Hoshino, 2001) where they found no relationship between R&D spending and the primary measure of economic or corporate success such as growth, enterprise profitability and shareholder return. With our result, we conclude that, some of the parent firm's features, which strengthen or weaken, may also contribute to the success of a subsidiary.

In addition, in this paper we have also considered the effect of parent characteristics on the performance of their subsidiaries. For Malaysia and Thailand, parent age indicates a negative significant relationship with a subsidiary's financial performance. These results show that company profitability changes systematically with a firm's age where in the early stages, firms realise substantial profitability increase, while mature firms face a slow decline in profitability (Warusawitharana, 2012). This due to the investment in product development that generates a profitability increase for young firms while competitiveness pressure from new entrants lead to profitability decline for mature firms. It also supports the empirical findings on industry lifecycle, the theoretical model of industry lifecycle and dynamics, and empirical patterns of firm and industry dynamics collectively suggest that the shape of the size distribution should change as an industry ages (Dinlersoz & MacDonald, 2009). Thus, we accept the third hypothesis.

This study contributes significantly to the development of a general FDI theory by using new financial variables for performance measurement in the case of Japanese subsidiaries in two ASEAN countries namely, Malaysia and Thailand from the year 2003 until 2009. Control in MNC's consists of planning, implementation, evaluation, and corrections of performance are important in order to achieve organisational objectives'. Performance evaluation is an essential part of a control system, comprising of the comparison of results with pre-determined objectives. However, this study was limited by data reliability and the lack of available data. Even though we tried to consider many variables from the data of parent companies in measuring the performance of subsidiaries, this does not mean that we were able to capture all the data variables. This implies that it is still necessary to use other variables such as investment objectives, and other profitability ratios of parent companies that may affect the success of subsidiaries in foreign countries. It would also be interesting to combine some actual financial data with self-assessment questionnaires completed by Japanese subsidiaries in other ASEAN countries and conduct some analyses. Furthermore, only Japanese companies took part in this research. Thus, with the data available to us, our general findings were confined to Japanese firms only. Future research should look into this aspect.

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